

July 2, 2014

On July 2, 2014 I began to start the cleaning process on the Retention Pond located at Tennessee Valley Recycling LLC. The fiscal address is 821 West College Street. I began the process by photographing the pond and activating the pumps to pump down the pond. This process will take approximately 2 days to pump down the pond where the bottom will dry. On this date, at 2:35 p.m., I had pumped 132,000 gallons of water from the pond. There still remained approximately 20,000 gallons in the pond. The water in the pond had dropped below the outside well wall and I had to open the drain valve to allow the pond to totally drain. As the water was flowing over the wall I observed for any skimming, bubbles, or sheens on the water. I did not see any of the previous mentioned activity in the water. There is a large population of turtles living in the pond. The following photos were taken before the pumping process was started. Before the pumping process started the sample basin was unplugged to prevent samples from being taken during the cleaning process.





At 8:00 a.m. on 07/03/14, I began to pump down more of the retention pond. The flow of the water had stopped flowing across the well wall, and now all water from the pond is now flowing through the drainage valve. This will be the slower process of draining the remaining pond. All water should be removed from the pond on this date. This will allow for drying time. At 3:30 p.m. on this date I checked the pond. The water level had dropped below the retaining wall, which had stopped the flow of water into the pump area. The Flow Meter registered 18,000 gallons of water being pumped from the Retention Pond. There still remained approximately 5,000 gallons of water in the pond, which could not be pumped out with pushing the water over the retaining wall in order for the water to flow out the gate valve and into the pump area.

On July 7, 2014, I returned to the pond to begin the process of the pushing the remaining water from the pond. I worked all day on this process to allow for full drainage of the pond. At the end of the day, the Flow Meter registered 3,000 gallons of water being removed with approximately 3,000 still in the pond.

On July 8, 2014 we received .068 inches of rain for the day. This allows more water to enter the pond. On July 9, 2014 we received an additional .22 inches of rain, which allowed for more water to enter the pond. On July 10, 2014 we were able to begin pumping the pond back down from the rainfall. On this date I pumped 72,000 gallons of water from the pond, which had collected from the previous two days of rain. July 11, 2014 I pumped down an additional 4,500 gallons of water from the pond, leaving only the water that need to be pushed out. On July 12, 2014, I worked on pushing the water out of the pond area, and into the pump area.

I returned to work on July 14, 2014 to be confronted with more rainfall. On this date we received a total of .23 inches of rainfall on this date. The process was to begin again. I was able to start the water removal process again. I began to pump the pond down again. With the runoff from the yard and the runoff from the front gate, the pond was standing 6.53 feet in water based on the depth gauge in the pump house. I was able to pump down and additional 92,000 gallons of water from the pond.

On July 15, 2014 I finished the pumping process and began to push the remaining water from the pond. I was able to remove 12,000 gallons of water from the pond. At this point the pond was clear of water, and only wet spots remained in the pond. I began working on the south end of the pond where the concrete is located. I started removing solids from the area. I removed 22 boxes of solids from the concrete. Each box weighed approximately 6,000 pounds each. The boxes were taken to the landfill area where the solids were allowed to dry.

On July 16, 2014 I worked more on removing the solids from the south end of the pond. I was able to remove 18 more boxes of solids. After completing the removal of the solids from the retention area, I began to remove what water was still held in the retention wall. I was able to push all the water over the retention wall, and allow the water to flow out into the pond to evaporate. Removal of the solids from the retention end was complete. Drying time was allowed for the pond to allow only the solids and the muck to be removed from the pond bottom.

On July 17, 2014 the pond was still wet so more time was allowed for the pond to dry. July 18, 2014, July 19, 2014, July 20, 2014 a total of 2.59 inches of rain was received in at our location. Over the three-day period I had to pump water from the pond several times. During this three-day period a total of 189,000 gallons of water was

pumped from the pond. On July 21, 2014 I was able to get into the pond and push water again. During this time I was able to remove another 22,000 gallons of water from the pond. By this time I was able to remove all the freestanding water from the pond and allow for drying time of the bottom of the pond. I was able to allow the pond to dry for seven days before entering the pond. On July 28, 2014, I was able to enter the pond and begin the cleaning process on removing all other substances from the pond bottom. I worked on the scraping and removing debris from the pond for five consecutive days without interference from the weather. All debris was taken up to the drying location and allowed to be completely dried before being placed into the landfill. A total of 42 boxes of dried material were removed from the pond without disturbing the red clay bottom of the pond. Total amount of material removed was approximately 126,000 pounds of materials. This material included pieces of metal which were thrown into the pond from the shredder, paper, and plastics which had blown into the pond over the past few months by the wind from the shredder, and other suspendable solids which have entered the pond from one source or another.







On August 4, 2014. The first pond cleaning for the year was complete. There were no noticeable signs of foreign materials in the water or the removed debris. I did not notice any sheen in the water, or color changes in the water. All barriers were checked and put back into place. Repairs were made to the gate valve handle, which had rusted and broken. Repairs were made to the spillway valve due to time setting up the moving gears inside the mechanism, and the valve was placed back into full operation.

On August 5, 2014, I removed all the bag filters from the filter house and replaced them with new filters. I also changed stage 5 and Stage 6 tank filters in the process. Stage 7 and 8 Tank Filters appeared to be clean and no need for changing those filters. All

systems were checked, and valves closed preparing the system for return to full operation. I returned to the Pond House where the Sampling system was plugged back in, and placed all three pumps into the automatic mode. This placing the pumping and filter system back into full operation. During the cleaning process, which began on July 2, 2014 and completed on August 4, 2014 there was 544,500 gallons of water pumped out of the pond on various days due to excess rainwater. 258,000 lbs. of slug and debris were removed from the pond, and placed into the landfill after drying out. This is the complete report on the retention pond cleaning for Tennessee Valley Recycling LLC, Pulaski Division for 2014 first six months. This report was completed by Dwight Garner, Yard Manager.